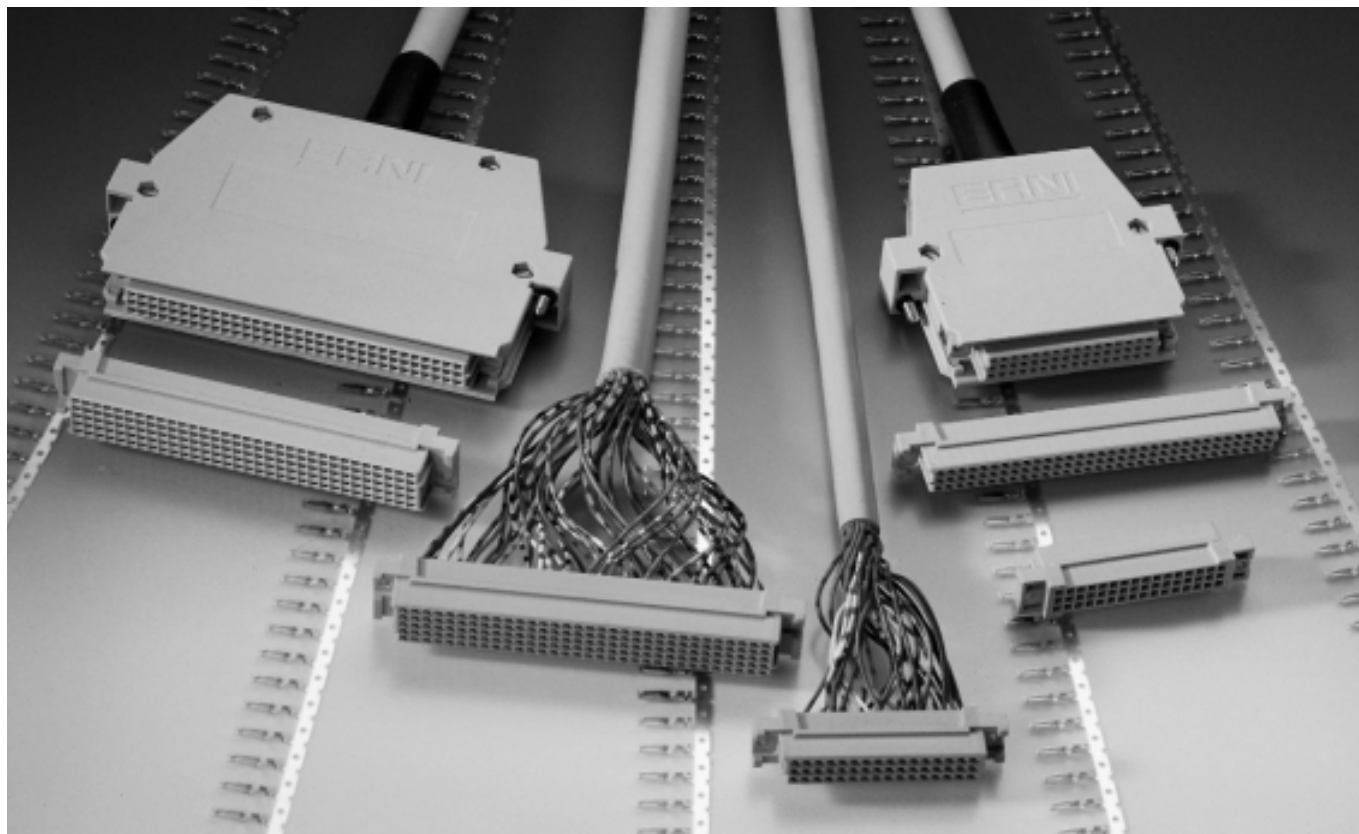


Connectors for the crimp snap-in technique

Mating and installation conditions as per DIN 41612/IEC 60603-2



General

Where the termination of interconnecting cables is concerned, crimp snap-in termination represents an efficient wiring method.

Crimp snap-in contacts are connected to the wires with the aid of suitable crimping tools. The contacts are supplied either singly or suspended from a strip.

Contacts efficiently assembled in this manner snap into the crimp snap-in mouldings provided, thus forming ready equipped connectors.

Crimp snap-in connectors are particularly suitable for flexible wiring with varying numbers of pins.

Hand tools or automatic crimping machines are available for crimping.

Main features

- Housing sizes available
 - size C with 96 contact cavities, rows abc
 - size C/2 with 48 contact cavities, rows abc
 - size E 160 with 160 contact cavities, rows abcde
 - Special designs and mixed complement with 70 contact cavities, rows abcde with 15 contact cavities and 55 press-fit contacts, rows abcde
- Cantilever female contacts for constant contact resistance
- Reliable shaping in the mating zone
- Assembly on standard tools
- Suitable for the ERNI interface connector system (connector housings for DIN connectors on front panel and wiring sides)
- Suitable for wire of AWG 28 – 20
Wire cross section 0.08 – 0.56 mm²
- Contacts can be detached from the female connector moulding with a simple extraction tool,

Electrical and mechanical data

Size			C	C/2	E160
Max. number of contacts			96	48	160
Contact row designation			abc	abc	abcde
Temperature range			- 65°... + 125° C		
Permissible humidity			Annual average ≤ 80%, max. 100%		
Creepage (Cr) and clearance (Cl) in mm	Contact to ground	Cr	1,8		
		Cl	1,6		
	Contact to contact	Cr	1,2		
		Cl	1,2		
Current rating at ambient temperature		A + 20°C + 70°C + 100°C	4,0 2,0 1,0		
Test voltage, 50Hz, 1 min					
Contact/contact		Vrms	1000		
contact/ground		Vrms	1550		
Contact resistance		mΩ	≥ 20		
Insulation resistance		Ω	≤ 10 ¹² at100 VDC		
Shock and vibration proofness			no contact breakdown at 20g and 10...2000Hz		
Housing material / inflammability			PBT 30% GV / UL 94 V-0		
Comparative creepagefigure to DIN IEC 112		PBT	CTI 275 / CTI 175 M		
Service life to DIN 41 612, Part 5			Performance level 2 ≤ 400 mating-cycles		
Mating and withdrawal for the assembled connectors		N	96 pin ≥ 90 48 pin ≥ 45 160 pin ≥ 150		
Withdrawal force per contact (test blade)		N	≤ 0,15		
Wire cross section			AWG 20 0,50-0,56 mm² AWG 22 0,30-0,35 mm² AWG 24 0,20-0,25 mm²		AWG 26 0,12-0,15 mm² AWG 28 0,08-0,11 mm²

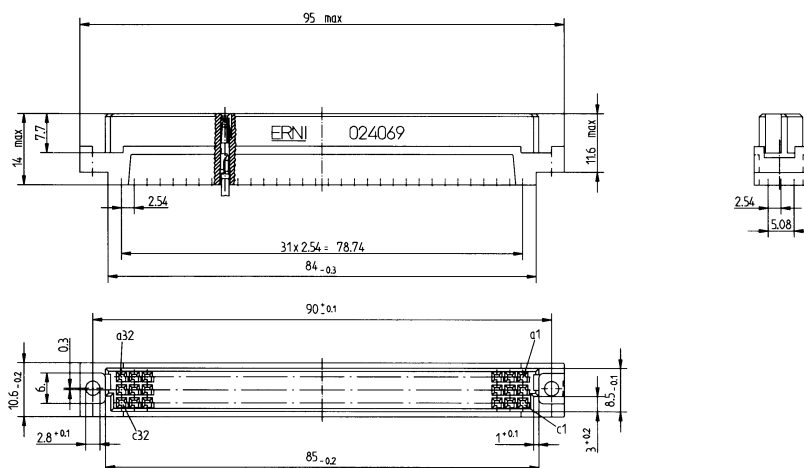
Performance level

- 207** Conforms to the requirements as per
DIN 41612/IEC 60603-2
performance level 2
400 mating cycles
Contact zone gold-plated
Terminal zone tin-plated

Female connector housing size C, 96 contact cavities

Mating and installation conditions as per DIN 41612/IEC 60603-2

Dimensional drawings

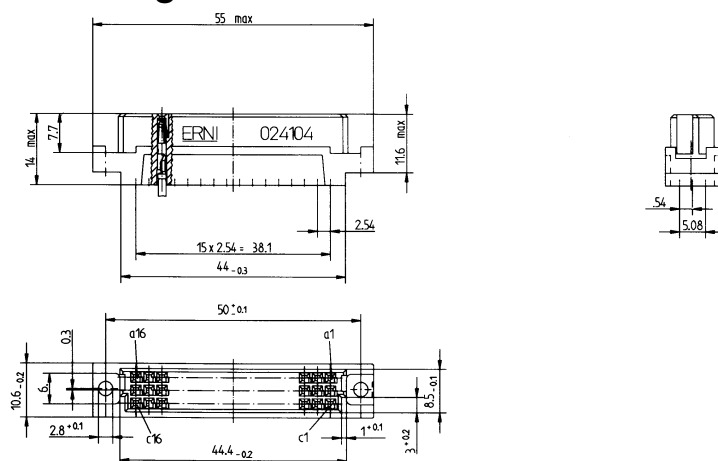


Ordering details

Description	Part no.
Empty housing size C-96	024 069

Female connector housing size C/2, 48 contact cavities

Dimensional drawings

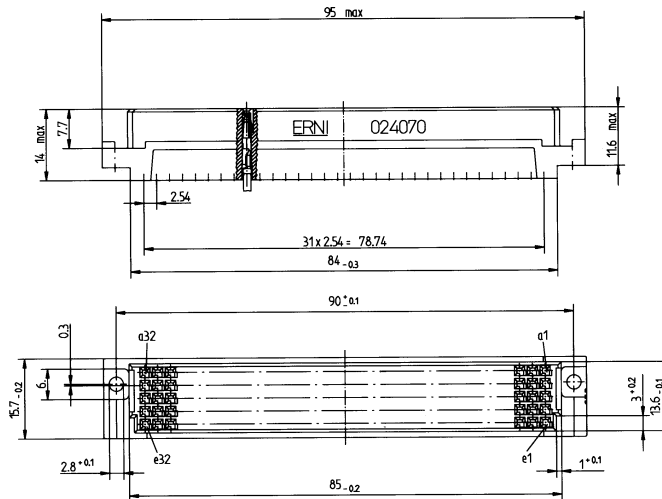


Ordering details

Description	Part no.
Empty housing size C/2-48	024 104

Female connector housing size E 160, 160 contact cavities

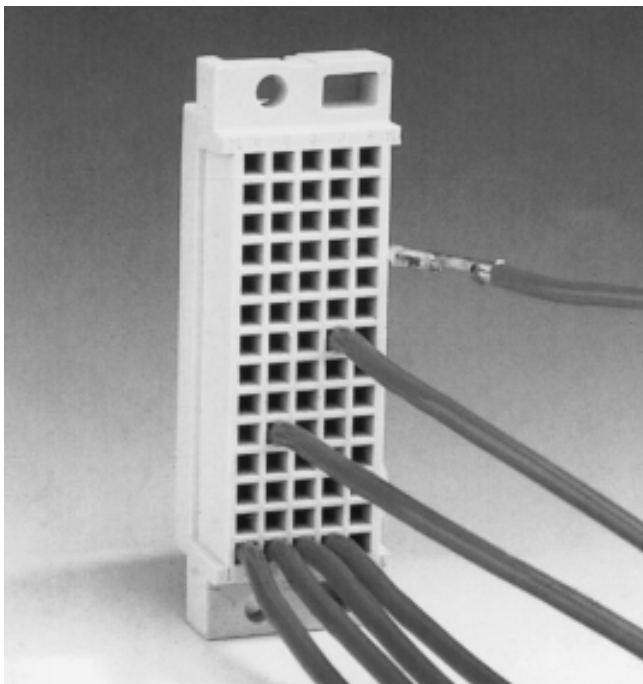
Dimensional drawings



Ordering details

Description	Part no.
Empty housing size E160-160	024 070

Application example



Interesting solutions arise in the application of crimp contacts.

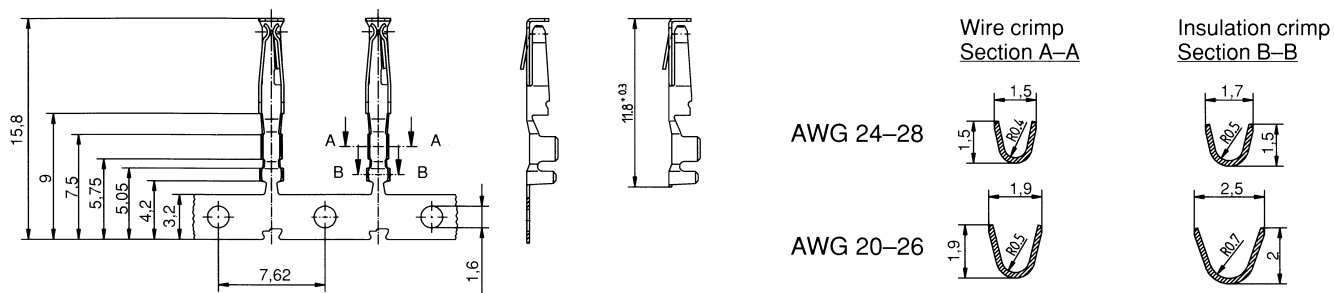
We have developed a 70-pin female connector housing together with a well-known manufacturer of programmable controllers.

We wish to use this example to illustrate that we are constantly developing components in cooperation with our customers.

Perhaps your company also has applications which you may wish to discuss with one of our field sales engineers.

Crimp contacts for female connector housings

Dimensional drawings



Ordering details

Description	Wire cross section		Perform. level	Part. no. and size		
	AWG	mm ²		Coil with 10.000 contacts	Coil with 500 contacts	Loose contacts 100 per bag
Crimp contacts	24–28	0,22–0,08	207	014 750	014 749	014 748
	20–26	0,56–0,14	207	014 730	014 729	014 728

Crimp contacts from ERNI are characterized by their precision.

The two opposite spring legs guarantee a constant contact.

Precise positioning of the contacts in the female connector housing is achieved by means of the box-type design in the front zone of the contact.

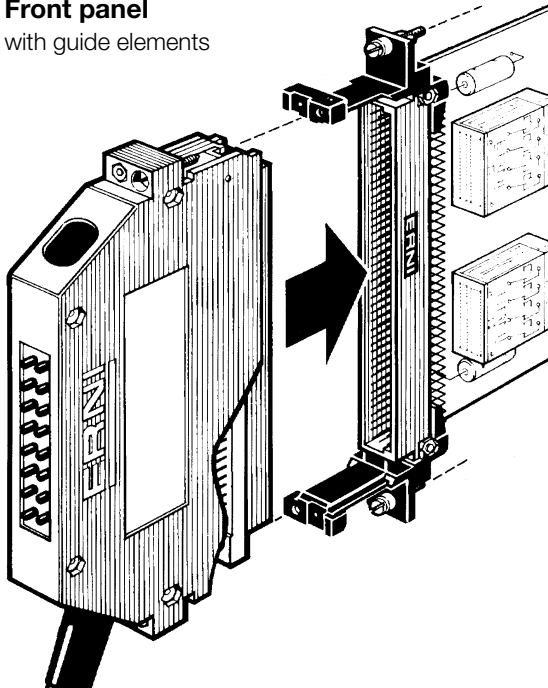
A spring-loaded barb on the side locks the contacts in the female connector housing.

This locking can be easily undone with a small tool.



The interface connector system from ERNI for the front panel and wiring sides

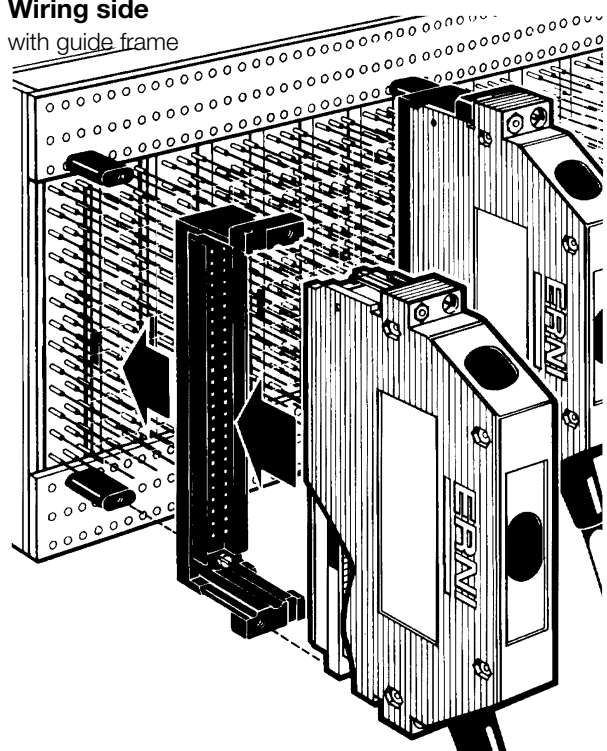
Front panel
with guide elements



The female connector housings of size C, C/2 and E 160 fit into the cable connector housings of series KSG 173 and KSG 193.

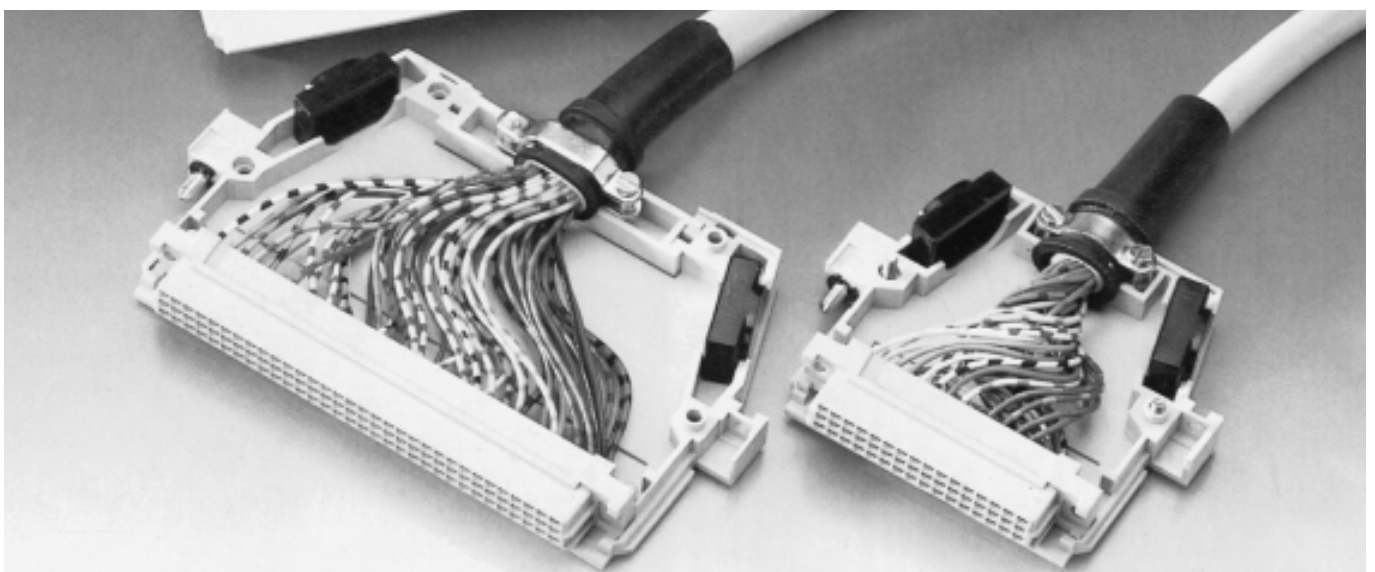
For installation on the front of the rack there are guide elements for mounting in the front panel and guide elements which can be mounted on the rack without a front panel.

Wiring side
with guide frame



Interface connection is possible from the wiring side with guide elements and guide frame.

Do ask for our technical documentation or contact one of our office or field sales advisers.



Assembly tools

Technical data and ordering details



Hand tool for
loose contacts

AWG 20 – 28
0,56 – 0,08 mm²

Part no.

014 374



Hand tool for reels with
500 contacts including reel
holder and adjustable feed

Part no.

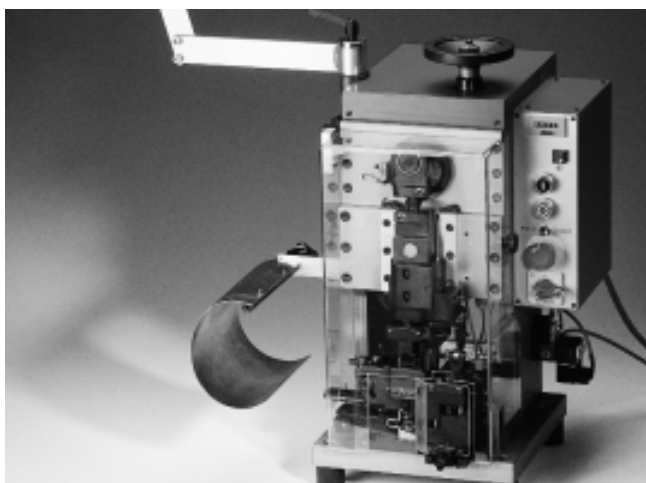
014 375



Disassembly tool
for all AWG ranges

Part no.

471 555



Crimp presses are available for the
automated usage of the crimp contacts.
Please refer to our ERNI-team when
purchasing this press.